Application No. 10/555,013 Reply to Office Action of September 15, 2008

## AMENDMENTS TO THE SPECIFICATION

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Please replace the paragraph beginning on page 2, line 29, with the following amended paragraph:

A) Every separate smaller piece of the toy consists of three discernible separate parts. The first enepart that is outermost with regard to the geometric centre of the solid, substantially cubic in shape, lies towards the solid's surface, the intermediate-second intermediate part, which has a conical sphenoid shape pointing substantially towards the geometric centre of the solid, its cross section being either in the shape of an equilateral spherical triangle or of an isosceles spherical trapezium or of any spherical quadrilateral, and its innermost-third part that is innermost with regard to the geometric centre of the solid, which is close to the solid geometric centre and is part of a sphere or of a spherical shell, delimited appropriately by conical or planar surface or by cylindrical surfaces only when it comes to the six caps of the solid. It is obvious, that the upper-cubicfirst outermost part is missing from the separate smaller pieces as it is spherically cut when these are not visible to the user.

Please replace the paragraph beginning on page 3, line 28, with the following amended paragraph:

G) According to the way of manufacture suggested by the present invention, two different solids correspond to each value of k. The solid with  $N=2\kappa$ , that is with an even number of visible layers per direction, and the solid with  $N=2\kappa+1$  with the next odd number of visible layers per direction. The only difference between these solids is that the intermediate layer of the first one is not visible to the user, whereas the intermediate layer of the second emerges at the toy surf-ace. These two solids consist, as it is expected, of exactly the same number of separate pieces, that is  $T=6N^2+3$ , where N can only be an even number, e.g.  $N=2\kappa$ . Therefore, the total number of separate pieces can also be expressed and  $T=6(2\kappa)^2+3$ .

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Please replace the paragraph beginning on page 7, line 3, with the following amended paragraph:

It should also be clarified that the angle  $\underline{\phi}1$  of the first cone  $\underline{k}1$  should be greater than 54,73561032° when the cone apex coincides with the coordinates beginning. However, if the cone apex moves to the negative part of the semi-axis of rotationlying opposite to the semi-axis which points to the direction in which the surface widens, then the angle  $\underline{\phi}1$  could be slightly less than 54,73561032° and this is the case especially when the number of layers increases.

Please replace the paragraph beginning on page 8, line 3, with the following amended paragraph:

In FIGS. 2 to 11 of the present invention one can easily see:

- a) The shape of all the different separate pieces each cube is consisted of.
- b) The three discernible parts of each separate piece; the <u>upper-first outermost</u> part which is substantially cubic, the <u>intermediate-second intermediate-part</u> which is of a conical sphenoid shape and the third <u>innermost part</u> which is a part of a sphere or of a spherical shell.
- c) The above-mentioned recesses-protrusions on the different separate pieces whenever necessary.
- d) The above-mentioned between adjacent layers general spherical recessesprotrusions, which secure the stability of construction and guide the layers during rotation around the axes.

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Please replace the paragraph beginning on page 8, line 23, with the following amended paragraph:

In FIG. 2.6 we can see the geometrical characteristics of the cubic logic toy No 2 where  $\mathbb{R}$ – $\mathbb{R}_1$  and  $\mathbb{R}_2$  generally represents the radiuses of concentric spherical surfaces that are necessary for the configuration of the internal surfaces of the cube's separate pieces.

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